

CLAIMS

What is claimed:

1. A knife including:
a body;
a blade pivotally connected to the body, the blade being movable between a closed position wherein the blade is positioned substantially within the body and an open position wherein the blade is positioned substantially outside the body; and
a movable arm disposed within the body and biased toward a locking position wherein the arm locks the blade in the open position.
2. The knife of claim 1, wherein the arm moves into and out of the locking position by flexing.
3. The knife of claim 1, wherein the arm is biased against the blade when the blade is in the closed position, thereby resisting movement of the blade out of the closed position.
4. The knife of claim 1, further including a release mechanism coupled to the blade, the release mechanism including a surface for moving the arm out of the locking position, thereby permitting movement of the blade out of the open position.
5. The knife of claim 4, wherein the release mechanism is movable toward and away from the arm along a path of travel defined by the blade.
6. The knife of claim 5, wherein the path of travel is defined by a slot formed in the blade.
7. The knife of claim 6, further including a spring positioned substantially within the slot, the spring being configured to bias the release mechanism toward the body of the knife.

8. The knife of claim 7, further including a post within the slot, the spring encircling the post at one end and engaging the release mechanism at another end.
9. The knife of claim 4, wherein the release mechanism includes a spring.
10. The knife of claim 9, wherein the spring is configured to bias the release mechanism toward the body of the knife.
11. The knife of claim 10, wherein the bias supplied by the spring must be overcome to permit the release mechanism to move the arm out of the locking position, thereby permitting movement of the blade out of the open position.
12. The knife of claim 1, wherein the body includes a pair of sides, the arm being connected to one of the sides.
13. The knife of claim 12, wherein each of the sides includes a liner, the arm being connected to the liner of one of the sides.
14. The knife of claim 13, wherein the body further includes a spacer disposed between the liners to form a cavity between the liners for receiving the blade when the blade is moved to the closed position, the arm being biased into the cavity.
15. The knife of claim 12, wherein the arm is integral with the one of the sides.
16. The knife of claim 12, wherein the blade is pivotally connected to an end of the side and includes a free end that is disposed adjacent another end of the side when the blade is in the closed position.
17. The knife of claim 16, wherein the arm has a first end that is connected to one of the sides and a free end that engages a stop surface of the blade.

18. A knife including:
a body defining a cavity, the body including an arm extending into the cavity;
a blade connected to the body for rotation about a rotation axis between a closed position substantially within the cavity, and an open position substantially outside the cavity wherein the arm engages the blade, thereby locking the blade in the open position;
a release mechanism coupled to the blade for movement toward and away from the arm, the release mechanism having a cam surface for urging the arm out of engagement with the blade when the blade is in the opened position and the release mechanism is moved toward the arm; and
a first and second safety member coupled to the body, the first and second tabs configured to limit access to the release mechanism.
19. The knife of claim 18, wherein the first and second safety members are coupled to the body at positions adjacent to the release mechanism.
20. The knife of claim 18, wherein the release mechanism is in a recessed position between an upper edge of the first and second safety members, thereby limiting access to the release mechanism.
21. The knife of claim 18, wherein the first safety member is coupled to the body at a position adjacent a first side of the release mechanism and the second safety member is coupled to the body at a position adjacent a second side of the release mechanism.
22. The knife of claim 21, wherein the first and second safety members are biased to a position above the release mechanism.
23. The knife of claim 18, wherein the body includes a first and second side, the arm being connected to one of the sides.

24. The knife of claim 23, wherein the first side includes a first liner and the second side includes a second liner.
25. The knife of claim 24, wherein the first liner includes an opening configured to accept the first safety member and the second liner includes an opening configured to accept the second safety member.
26. The knife of claim 25, wherein the body further includes a spacer disposed between the first and second liners to form a cavity between the liners for receiving the blade when the blade is moved to the closed position, the arm being biased to extend into the cavity.
27. The knife of claim 26, wherein the body further includes a first and second scale, the first scale positioned on an outer side of the first liner, the second scale positioned on an outer side of the second liner.
28. The knife of claim 27, wherein the first scale includes a post configured to be positioned in a slot in the first safety member and the second scale includes a post configured to be positioned in a slot in the second safety member.
29. The knife of claim 28, wherein the slots in the first and second safety members are configured to define a path of movement of the first and second safety members from a first position limiting access to the release mechanism to a second position permitting access to the release mechanism.
30. The knife of claim 29, wherein the slots define a substantially horizontal path.
31. The knife of claim 29, wherein the slots define a substantially L-shaped path.
32. The knife of claim 29, wherein the slots define a substantially triangularly shaped path.

33. The knife of claim 29, wherein the first scales includes a first spring configured to bias the first safety member toward the first position and the second scale includes a second spring configured to bias a the second safety members toward the first position.

34. The knife of claim 33, wherein the first scales includes a recessed area configured to receive the first spring and the second scale includes a recessed area configured to receive the spring.

35. The knife of claim 34, wherein the first spring includes a first pin configured to engage a rear surface of the first safety member and the second spring including a second pin configured to engage a rear surface of the second safety member.

36. The knife of claim 35, wherein the first pin extends from the first spring into the opening in the first liner and the second pin extends from the second spring into the opening in the second liner.

37. The knife of claim 33, wherein the first safety member includes a portion configured to engage a notch in the first liner when the first safety member is in the first position and the second safety member includes a portion configured to engage a notch in the second liner when the second safety member is in the first position.

38. A knife including:
a body;

a blade pivotally connected to the body, the blade being movable between a closed position wherein the blade is positioned substantially within the body and an open position wherein the blade is positioned substantially outside the body; and

a pair of movable arms disposed within the body and biased toward one another into a locking position wherein the arms lock the blade in the open position, the arms including a first end positioned adjacent the blade in the locking position, each arm including a recessed area in a first end; and

a release mechanism coupled to the blade, the release mechanism including an end configured to enter the recessed area in the first end of the arms for moving the arms out of the locking position, thereby permitting movement of the blade out of the open position.

39. The knife of claim 38, wherein the end of the release mechanism is positioned on a portion of the arms above the recessed areas when the arms are in the locking position.

40. The knife of claim 39, wherein the release mechanism is moved toward the blade to permit the end to align with the recessed areas in the ends of the arms.

41. The knife of claim 39, wherein the release mechanism is biased towards the portion of the arms above the recessed areas when the arms are in the locking position.

42. A knife including:

a body including a pair of sides and a spacer, the spacer disposed between the sides to form a cavity between the sides;

an arm coupled to one of the sides, the arm extending into the cavity;

a blade pivotally connected to the body, the blade being movable between a closed position wherein the blade is positioned substantially within the cavity and an open position wherein the blade is positioned substantially outside the cavity and the arm engages the blade, thereby locking the blade in the open position; and

a release mechanism coupled to the blade, the release mechanism including a cam surface for urging the arm out of engagement with the blade, thereby permitting movement of the blade out of the open position.

43. The knife of claim 42, wherein the spacer includes a notch configured to engage the release mechanism when the blade is in the closed position.

44. A knife including:

a body defining a cavity, the body including an arm extending into the cavity;
a blade connected to the body for rotation about a rotation axis between a closed position substantially within the cavity, and an open position substantially outside the cavity wherein the arm engages the blade, thereby locking the blade in the open position, the blade including a first slot extending through the blade adjacent the rotation axis, and a second slot extending into the blade to intersect the first slot; and

a release mechanism coupled to the blade for movement toward and away from the arm, the release mechanism having a cam surface for urging the arm out of engagement with the blade when the release mechanism is moved toward the arm, a tab extending into the second slot of the blade so that an opening in the tab aligns with the first slot, and a rod extending through the first slot and the opening to couple the release mechanism to the blade, the slots defining a path of travel of the release mechanism toward and away from the arm.

45. The knife of claim 44, wherein the body includes a pair of arms extending into the cavity for locking the blade in the opened position.

46. The knife of claim 45, wherein the release mechanism includes a pair of cam surfaces for urging the pair of arms out of engagement with the blade when the blade is in the opened position and the release mechanism is moved toward the arms.

47. A knife including:

a body defining a cavity, the body including an arm extending into the cavity;
a blade connected to the body for rotation about a rotation axis between a closed position substantially within the cavity, and an open position substantially outside the cavity wherein the arm engages the blade, thereby locking the blade in the open position; and

a release mechanism coupled to the blade for movement toward and away from the arm, the release mechanism having a cam surface for urging the arm out of engagement with the blade when the blade is in the opened position and the release mechanism is moved toward the arm.

48. The knife of claim 47, wherein the release mechanism includes a bearing surface to which force is applied to move the release mechanism toward and away from the arm.

49. The knife of claim 47, wherein the arm is flexible.

50. The knife of claim 47 wherein the body includes a pair of sides, the arm being connected to one of the sides.

51. The knife of claim 50, wherein each of the sides includes a liner, the arm being connected to the liner of the one side.

52. The knife of claim 50, wherein the arm has one end connected to the one side and a free end that engages the blade.

53. The knife of claim 50, wherein the arm is integral with the one side.

54. The knife of claim 51, wherein the body further includes a spacer disposed between the liners to define a width of the cavity.

55. A knife including:

means for cutting being movable between a closed position and an open position; and

means connected to the cutting means for receiving the cutting means when the cutting means is in the closed position and holding the cutting means when the cutting means is in the open position, the means for receiving and holding defining a

cavity and including engagement means extending into the cavity for resisting movement of the cutting means out of the closed position and locking the cutting means in the open position;

wherein the cutting means includes means for releasing the engagement means to permit movement of the cutting means out of the opened position.

56. A knife including:

a body;

a blade pivotally connected to the body, the blade being configured for movement, using either one of a left hand and a right hand, individually, between a closed position wherein the blade is positioned substantially within the body and an open position wherein the blade is positioned substantially outside the body; and

a movable arm connected to the body having an end that moves into a locking position when the blade is moved into the open position, thereby locking the blade in the open position.